

## CLAIMS

1. Method for downloading ring tones for personalizing mobile phones, characterized in that, in addition to an audio content, the  
5 downloaded data comprise a graphical animation content for being displayed on the screen of the mobile phone when the audio content is played on the phone upon reception of an incoming call, an application for reading graphical animations content, and, if need be also for reading audio content, being simultaneously downloaded or having been  
10 downloaded beforehand and stored at the operating layer of the mobile phone.

2. Method according to claim 1, characterized in that the downloaded data comprises a codec which comprises an audio content and a graphical  
15 animations content, an application for reading such a type of codec being simultaneously downloaded or having been previously downloaded and memorized at the operating layer of the mobile phone.

3. Method according to claim 1, characterized in that the downloaded  
20 data comprises a codec which comprises an audio content and a codec which comprises a graphical animations content.

4. Method according to one of the preceding claims, characterized in that at each new downloading, the downloaded data comprises an  
25 application for reading the graphical animations content and/or audio content.

5. Method according to claim 4, characterized in that the downloaded data also comprises one or more configuration files.

6. Method according to one of the preceding claims, characterized in that, with the application for reading the graphical content, a background task application is downloaded in the operating layer of the mobile phone, which monitors the notification of an incoming call to a phone server of  
5 said layer and activates the reading of the graphical content by the reading application.

7. Method according to one of claims 1 to 5, characterized in that the reading application downloaded in the operating layer monitors in  
10 background task the activation of a codec corresponding to a ring tone which is associated to it, the reading of the graphical animations content being triggered when said coded activation is detected.

8. Method according to one of claims 1 to 5, characterized in that the  
15 reading application downloaded in the operating layer monitors in background task the signalling of a call to an interface phone application or to the phone server of the operating layer, the reading of the graphical animation content being triggered when an event corresponding to this signalling is detected.

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9. Method according to one of the preceding claims, characterized in that the reading application bypasses the graphical layers of the phone for writing directly in the screen memory.

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10. Method according to claim 9, characterized in that the reading application uses a mask for not entering into conflict with certain areas for displaying certain icons.

11. Method according to one of the preceding claims, characterized  
30 in that the data are downloaded from a container storing graphical

animations in a native format of the mobile phone or of its operating system.

5 12. Method according to one of claims 1 to 10, characterized in that during the downloading, the data are downloaded while being converted such that the graphical animations are stored in the mobile phone in the native image format of the latter or of its operating system.

10 13. Method according to one of the preceding claims, characterized in that each new downloaded ring tone is automatically memorized in the mobile phone as a favourite intended to be activated at the next incoming call.

15 14. Method according to claim 13, characterized in that the application is installed or the content associated to the codec is activated, all the necessary actions for simultaneous activation of the sound and graphics being done automatically and without intervention of the user in the different configuration menus of the phone.

20 15. Mobile phone adapted to download ring tone for personalization of mobile phones, characterized in that the operating layer stores an application for reading graphical animations contents, the phone comprising means for triggering the reading of this graphical animations content upon reception of an incoming call.

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16. Phone according to claim 15, characterized in that the reading application is adapted for reading a codec which comprises an audio content and a graphical animations content.

30 17. Phone according to one of the preceding claims, characterized in that with the reading application is a background task application which

monitors the notification of a call to the phone server of said layer and activates the graphical content reading by the reading application.

18 Phone according to one of claim 15 and 16, characterized in that  
5 the reading application monitors in background task the activation of a codec corresponding to a ring tone which is associated to it, the reading of the graphical animations content being triggered when said codec activation is detected.

10 19. Phone according to one of claims 15 and 16, characterized in that the reading application monitors, in background task, the signalling of a call to an interface phone application or to the phone server of the operating layer, the reading to the graphical animation content being triggered when an event corresponding to this signalling is detected.

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20. Phone according to claims 15 to 19, characterized in that the playing application bypasses the graphical layers of the phone to directly attack the screen memory.

20 21. Phone according to claim 20, characterized in that the reading application comprises means for masking certain icons displaying areas of the phone.

22. Phone according to one of claims 15 to 21, characterized in that it  
25 comprises means adapted for detecting that the user decides to change his favourite ring tone, and for blocking the activation of the corresponding graphical animation when a change of this type is detected.

23. Phone according to claims 15 to 22, characterized in that it  
30 comprises an interface application (if need be also downloaded) which

allows the user to compose his own combined contents from the content already present on his phone or which he can download otherwise.

24. Method for enabling the reading of at least one personalization  
5 content, such as a graphical content or an audio content, upon reception  
of an incoming call on the mobile phone, characterized in that a  
background task application, possibly downloaded in the operating layer of  
the mobile phone, monitors the notification of an incoming call to the  
phone server of said layer and activates the reading of the content by the  
10 reading application upon the notification of an incoming call.

25. Method for enabling the substantially synchronous reading of at  
least an audio content and a graphical content upon reception of an  
incoming call on the mobile phone, characterized in that a background  
15 task application, possibly downloaded in the operating layer of the mobile  
phone, monitors the notification of an incoming call to the phone server of  
said layer and activates the reading of the graphical content by the reading  
application content upon the notification of an incoming call.

20 26. Mobile phone adapted for enabling the reading of at least a  
personalization content upon reception of an incoming call, characterized  
in that the phone comprises a background task application, possibly  
downloaded in the operating layer of the mobile phone, adapted for  
monitoring the notification of an incoming call to the phone server of said  
25 layer and for activating the reading of the graphical content by the reading  
application content upon the notification of an incoming call.

27. Mobile phone adapted for enabling the substantially synchronous  
reading of at least an audio content and a graphical content upon  
30 reception of an incoming call, characterized in that the phone comprises a  
background task application, possibly downloaded in the operating layer of

the mobile phone, adapted for monitoring the notification of an incoming call to the phone server of said layer and for activating the reading of the graphical content by the reading application content upon the notification of an incoming call.

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28. Method for enabling the reading at least an animation content upon reception of an incoming call on the mobile phone, characterized in that an application for reading graphical content possibly downloaded in the operating layer of the mobile phone monitors in background task the  
10 activation of a codec and activates the reading of the associated personalization content when said activation codec is detected.

29. Method for enabling the substantially synchronous reading of at least an audio content and a graphical content upon reception of an  
15 incoming call, characterized in that an application for reading graphical content possibly downloaded in the operating layer of the mobile phone monitors in background task the activation of a codec corresponding to the audio content and activates the reading of the associated personalization content when said activation codec is detected.

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30. Mobile phone adapted for enabling the reading of at least a personalization content upon reception of an incoming call, characterized in that the phone comprises an application for reading graphical content possibly downloaded in the operating layer of the mobile phone, adapted  
25 for monitoring in background task the activation of a codec corresponding to the audio content and for activating the reading of the associated personalization content when said activation codec is detected.

31. Method for enabling the reading of at least a personalization  
30 content upon reception of an incoming call on a mobile phone, characterized in that an application for reading the content possibly



downloaded in the operating layer of the mobile phone monitors in background task the notification of an incoming call to an interface phone application or to a phone server of said layer and activates the reading of said content upon notification of an incoming call.

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32. Method for enabling the substantially synchronous reading of at least an audio content and a graphical content upon reception of an incoming call on a mobile phone, characterized in that an application for reading the graphical content possibly downloaded in the operating layer of the mobile phone monitors in background task the notification of an incoming call to an interface phone application or to a phone server of said layer and activates the reading of said content upon notification of an incoming call.

33. Mobile phone adapted for the reading of at least a personalization content upon reception of an incoming call on a mobile phone, characterized in that the phone comprises an application for reading said content, possibly downloaded in the operating layer of the mobile phone, adapted for monitoring in background task the notification of an incoming call to an interface phone application or to a phone server of said layer and for activating the reading of said content upon notification of an incoming call.

34. Mobile phone adapted for enabling the substantially synchronous reading of at least an audio content and a graphical content upon reception of an incoming call on a mobile phone, characterized in that it comprises an application for reading the graphical content possibly downloaded in the operating layer of the mobile phone adapted for monitoring in background task the notification of an incoming call to an interface phone application or to a phone server of said layer and for activating the reading of said content upon notification of an incoming call.

35. Method for activating at least one personalization content upon reception of an incoming call on a mobile phone, characterized in that it comprises the steps consisting in:

- 5       - downloading at least said content,
- automatically placing said content as a favourite intended to be activated upon reception of the next incoming call, this step being performed without intervention of the user in the different configuration menus of the phone.

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36. Method for activating an audio content upon reception of an incoming call on a mobile phone, characterized in that it comprises the steps consisting in:

- 15       - downloading the audio content and an associated graphical animation content,
- automatically placing the audio content as a favourite intended to be activated upon reception of the next incoming call, this step being performed without intervention of the user in the different configuration menus of the phone.

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37. Mobile phone adapted for allowing the reading of at least one personalization content upon reception of an incoming call on the mobile phone, characterized in that it comprises an application, which upon downloading of said content, automatically places it as a favourite  
25 intended to be activated upon reception of the next incoming call, this step being performed without intervention of the user in the different configuration menus of the phone.

38. Method for personalizing mobile phones, characterized in that it  
30 comprises the steps according to which:



- a user compose a combined content by associating an audio content and a graphical animation content, from contents already present in the phone or which he can download otherwise, by means of an interface application memorized at the operating layer of the phone,

5       - when the audio content is played on the phone upon reception of an incoming call, an application for reading graphical content animation, and if need be for reading also audio content, read the graphical animation content.

10       39. Mobile phone, characterized in that it comprises an interface application, memorized at the operating layer of the phone, adapted for allowing a user to compose a combined content by associating an audio content and a graphical animation content, from contents already present in the phone or which he can download otherwise, the graphical animation  
15       content being intended to be read by a reading application of the phone when the audio content is played on the phone upon reception of an incoming call.

20       40. Method for allowing the reading of a graphical animation content upon reception of an incoming call on a mobile phone, characterized in that it comprises the steps consisting in:

- storing in the mobile phone a graphical animation content as fixed images in native format according to a parametrizable frame rate.

25       41. Mobile phone adapted to allow the reading of a graphical animation content upon reception of an incoming call, characterized in that it comprises a reading application adapted for displaying in sequence fixed images in native format according to a parametrizable frame rate upon reception of an incoming call.

42. Method for downloading ring tones for personalizing mobile phones, characterized in that it comprises the steps consisting in:

- memorizing a file including an audio content and/or a graphical animation content, in encrypted form, at the operating layer of the phone,
- 5       - upon reception of an incoming call, decrypting the file in random access memory and reading the audio content and/or the graphical content.

43. Mobile phone adapted for allowing the downloading of ring tones  
10 for personalizing mobile phones, characterized in that it comprises means for memorizing a file including an audio content and/or a graphical animation content, in encrypted form, at the operating layer of the phone, and a reading application adapted, upon reception of an incoming call, for decrypting the file in random access memory and for reading the audio  
15 content and/or the graphical content.

44. Method for downloading and reading an animation content, according to which said content is transferred to the phone in a compressed format and said content is stored in the phone in a  
20 decompressed format, said content being read in real time under this format upon reception of an incoming call.